

Distributed by:

**JAMECO**<sup>®</sup>  
ELECTRONICS

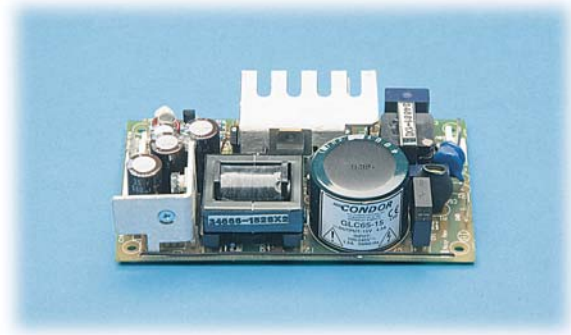
**www.Jameco.com ♦ 1-800-831-4242**

The content and copyrights of the attached  
material are the property of its owner.

Jameco Part Number 777910

# GLC65 Commercial/GLM65 Medical

## 65 Watt Single Output Global Performance Switchers



### SPECIFICATIONS:

#### Ac Input

90-264 Vac, 47-63 Hz single phase.

#### Input Current

Maximum input current at minimum output voltage and output overload will be less than 1.7 A. Meets input current harmonic requirements of IEC1000-3-2.

#### Output Power

Normal continuous output power is 65 W, 75 W peak for 60 s. The 3.3 Vdc unit is 36.3 W and the 5 Vdc unit is 55 W continuous.

#### Hold-Up Time

20 ms from loss of ac input at 65 W load, from 120 Vac input.

#### Overload Protection

Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit.

#### Output Noise

0.5% rms, 1% pk-pk, 20 MHz bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply with load terminated with 0.1  $\mu$ F capacitor.

#### Transient Response

Main output: 500  $\mu$ s typical response time for return to within 0.5% of final value for a 50% load step within the regulation limits of minimum and maximum load,  $\Delta i/\Delta t < 0.2$  A/ $\mu$ s. Maximum voltage deviation is 3.5%. Startup/shutdown overshoot less than 3%.

#### Voltage Adjustment

Adjustable potentiometer capable of  $\pm 5\%$  change from nominal setting.

#### Efficiency

82 to 94% minimum at full rated load, nominal input voltage, depending on model.

### FEATURES:

- 4.1 W/in<sup>3</sup>
- Compact (3.0" x 5.0" x 1.06")
- Ultra-high efficiency (up to 94%) using patented technology
- Meets harmonic requirements of IEC1000-3-2, Class A
- Conducted EMI exceeds FCC Class B and CISPR 22 Class B (Commercial models) and CISPR 11 Class B (Medical models)
- 2-year warranty
- Exempt from line harmonics standard EN61000-3-2
- Commercial Approved to [UL1950](#), [IEC950](#), [EN60950](#), [CSA22.2 No. 950](#)
- Medical Approved to [UL2601](#), [EN60601](#), [CSA22.2 No. 601.1](#)
- Multiple output versions also available
- $\text{CE}$  marked to LVD

#### Inrush Current

Inrush is limited by internal thermistor. The inrush at 240 Vac, averaged over the first ac half-cycle under cold start conditions will not exceed 37A.

#### EMI/EMC Compliance

All models include built-in EMI filtering to meet the following emissions requirements:

| EMI SPECIFICATIONS        | COMPLIANCE LEVEL                    |
|---------------------------|-------------------------------------|
| Conducted Emissions GLC65 | EN55022 Class B; FCC Class B        |
| Conducted Emissions GLM65 | EN55011 Class B; FCC Class B        |
| Static Discharge          | EN61000-4-2, 6 kV contact, 8 kV air |
| RF Field Susceptibility   | EN61000-4-3, 3 V/meter              |
| Fast Transients/Bursts    | EN61000-4-4, 2 kV, 5 kHz            |
| Surge Susceptibility      | EN61000-4-5, 1 kV diff., 2 kV com.  |

#### Commercial Leakage Current

Under normal conditions, leakage current is 425  $\mu$ A with 132 Vac @ 60 Hz input.

#### Commercial Safety

All GLC models are approved to [UL1950](#), [CSA22.2 No. 950](#), [IEC950](#) and [EN60950](#).

#### Medical Leakage Current

The maximum leakage current under single-fault conditions (254 Vac @ 50 Hz) is 120  $\mu$ A. Under normal conditions, leakage current is 31  $\mu$ A with 132 Vac @ 60 Hz input.

#### Medical Safety

All GLM models are approved to [UL2601](#), [CSA22.2 No. 601](#), [IEC601-1](#) and [EN60601](#). Consult factory for approval status.

# GLC65 Commercial/GLM65 Medical 65 Watt Single Output

| Commercial Model | Medical Model | Output | Current | Total Regulation | V1 Adjustment | V1 OVP Setpoint | Ripple and Noise |
|------------------|---------------|--------|---------|------------------|---------------|-----------------|------------------|
| GLC65-5          | GLM65-5       | 5.1 V  | 9 A     | 2%               | ±5%           | 6.2 ± 0.6 V     | 1%               |
| GLC65-12         | GLM65-12      | 12 V   | 5.5 A   | 2%               | ±5%           | 14 ± 1.1 V      | 1%               |
| GLC65-15         | GLM65-15      | 15 V   | 4.3 A   | 2%               | ±5%           | 18.5 ± 1.5 V    | 1%               |
| GLC65-18         | GLM65-18      | 18 V   | 3.6 A   | 2%               | ±5%           | 21.7 ± 2.0 V    | 1%               |
| GLC65-24         | GLM65-24      | 24 V   | 2.7 A   | 2%               | ±5%           | 28 ± 2.5 V      | 1%               |
| GLC65-28         | GLM65-28      | 28 V   | 2.3 A   | 2%               | ±5%           | 34 ± 2.8 V      | 1%               |
| GLC65-48         | GLM65-48      | 48 V   | 1.35 A  | 2%               | ±5%           | 55 ± 4.0 V      | 1%               |

## GLC65/GLM65 MECHANICAL SPECIFICATIONS

INPUT J1:  
AMP P/N 640445-3, .156 [3.96mm] CTR,  
0.045 [1.14mm] SQUARE PIN HEADER

PIN 3) AC NEUTRAL  
PIN 2) NO PIN  
PIN 1) AC LINE

OUTPUT J2:  
AMP P/N 640445-6, .156 [3.96mm] CTR,  
0.045 [1.14mm] SQUARE PIN HEADER

PIN 1-3) OUTPUT  
PIN 4-6) COMMON  
GND: 0.250" FASTON TAB

SENSE J3:  
AMP P/N 640456-2, .100 [2.54mm] CTR,  
0.025 [0.64mm] SQUARE PIN HEADER

PIN 1) +SENSE  
PIN 2) -SENSE

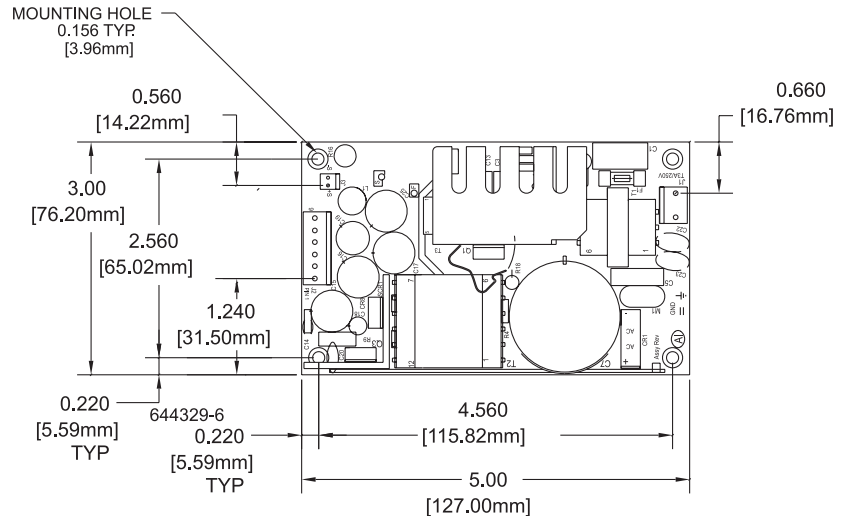
MATING CONNECTORS: AMP P/N

|        | HOUSING  | CONTACTS |
|--------|----------|----------|
| INPUT  | 640250-3 | 770476-1 |
| OUTPUT | 640250-6 | 770476-1 |
| SENSE  | 640440-2 | 770476-1 |

NOTE: 5A MAXIMUM RECOMMENDED CURRENT  
PER CONNECTOR PIN

WEIGHT: 5 OZ.  
[0.142 KG]

TOLERANCES:  
X.XX = ± 0.030 (0.76MM)  
X.XXX = ± 0.010 (0.25MM)



MAX. COMPONENT HEIGHT 1.20" [30.28 mm]  
MAX. LEAD PROTRUSION 0.10" [2.54mm]

| Environmental Specification | Operating                                       | Non-operating                                 |
|-----------------------------|---|---|
| Temperature (A)             | 0 to 50°C                                       | -40 to +85°C                                  |
| Humidity (A)                | 0 to 95% RH                                     | 0 to 95% RH                                   |
| Shock (B)                   | 20 g <sub>pk</sub>                              | 40 g <sub>pk</sub>                            |
| Altitude                    | -500 to 10,000 ft                               | -500 to 40,000 ft                             |
| Vibration (C)               | 1.5 g <sub>rms</sub> , 0.003 g <sup>2</sup> /Hz | 5 g <sub>rms</sub> , 0.026 g <sup>2</sup> /Hz |

- Units should be allowed to warm up/operate under non-condensing conditions before application of power. Derate output current and total output power by 2.5% per °C above 50°C.
- Shock testing—half-sinusoidal, 10 ± 3 ms duration, ± direction, 3 orthogonal axes, total 6 shocks.
- Random vibration—10 to 2000Hz, 6dB/octave roll-off from 350 to 2000Hz, 3 orthogonal axes. Tested for 10 min./axis operating and 1 hr./axis non-operating.